UNION CARBIDE

NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 4 — No. 14 July 19, 1973

QUESTION BOX

If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, **Nuclear Division News.** *(Or telephone it in to your plant news representative . . . see page two). You may or may not sign your name. It will not be used in the paper if you so desire.*

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

QUESTION: What has been done by the Affirmative Action Representatives? What are they supposed to be doing?

ANSWER: The responsibility for the development, implementation, and evaluation of the Affirmative Action Program in each division in our four installations is placed squarely on the shoulders of the division head. Affirmative Action Representatives are appointed by division superintendents and directors to assist them in their job of making the program successful. During February and March, for example, the Representatives helped prepare the FY 1974 Affirmative Action Plan. Now they are assessing the progress made during FY 1973.

During last year they held meetings with all employees to discuss the Affirmative Action Program. Many of the Representatives responded to employee questions and complaints. The responsibilities of the Representatives have recently been more clearly defined, and the procedure for acting on employees questions, comments, and complaints, has also been made more effective. An article elsewhere in this issue summarizes some of their other responsibilities and gives the names of all of our current Affirmative Action Representatives.

A story on the Nuclear Division's affirmative action program can be found on page three of this issue of Nuclear Division News.

QUESTION: The question I would like answered concerns the life span of hourly people who work in nuclear plants such as Y-12. "Is the life span shorter for hourly workers who work in nuclear plants such as Y-12 compared to other industries - automobile, textile, etc., and how does it compare with all other industries nation wide?"

I have heard that there are very few machinists who work here at Y-12 that live to be 67 years old. Is that right?

ANSWER: A study comparing the life-span of Nuclear Division employees with employees in other industries has not been made; however, a study was conducted in 1969-1970 to determine if working with uranium affected the mortality (death) rate of long-term uranium workers. Present and former employees of ORGDP and Y-12 were separated into uranium and nonuranium workers, and those who had died were identified. Expected death rates were computed for each group using standard recognized mortality tables.

It was found that uranium workers had a slightly lower actual death rate than the nonuranium workers. But perhaps most significant is the fact that all employees of the Nuclear Division experienced a lower actual death rate than the mortality tables predicted. Thus, it appears that working in our type of environment at least does not reduce the life-span of employees. Many factors might be said to contribute to our generally lower mortality rate. Good income, good hospital and medical benefit plans, and periodic physical examinations, as well as various industrial hygiene, health physics and other special services, are all factors that help to promote good employee health and longevity.

Placement efforts stressed by Hibbs in press conference

Despite cutbacks in weapons activities, Nuclear Division President Roger F. Hibbs is optimistic about the long-range future of Y-12 and the other two Oak Ridge plants. Hibbs last week met representatives from newspapers, radio and television stations, to discuss the 980 reduction-in-force from Y-12, recently announced by the Atomic Energy Commission.

Preceding the press conference, Hibbs gave an informal statement, briefing media personnel on the "ups and downs" of employment in the AEC complex in the last few years.

Hibbs voiced optimism in reviewing the situation at ORNL. "We have completed the terminations there. The financial situation, at least as it came through Congress, looks very good for next year, particularly in the fusion and HTGR fuel cycle work.

Optimistic outlook

"As for the gaseous diffusion plants, the word is 'go.' We are right in the start of a very major modification program of these gaseous diffusion plants. Between now and 1980 there will be an expenditure of almost $800 million to improve these plants to supply uranium to fuel nuclear power reactors throughout the country.

"In addition, I am quite optimistic about the future of Y-12, because I know it's a first rate team of people.

"Less than 200 people were actually laid off (of the 700 announced to be terminated last January) due to a combination of transfers of personnel to other plants, principally the Oak Ridge Gaseous Diffusion Plant, and through some personnel to the Atomic Energy Commission's regulatory activities plus normal attrition due to retirements, medical terminations and the like."

Procedures detailed

Of these 200, Hibbs pointed out, practically each one of them had at least one job offer "as a result of an activity which we have pursued on several occasions in the past where we utilize our personnel department and other contacts with industries, laboratories, and universities throughout the country, and particularly in the Southeast, to secure job offers for appropriate people."

Hibbs described the procedures for placing personnel in other installations, "The first thing we do is examine what the situation and employment needs are in these other plants, then review openings throughout the Union Carbide organization and then openings which exist both in this immediate vicinity as well as across the nation. So, in most cases, people have had job offers. One of the problems we've had is that people very understandably don't wish to leave the East Tennessee region.

New jobs opening

"In the last layoff, I'm informed by our personnel people that for the hourly paid people -- craftsmen and people of that sort -- everyone had at least one or two job offers."

Of the 980 employees to be laid off from Y-12, Hibbs expected some to be transferred or rehired at the Oak Ridge

(Continued on Page 8)

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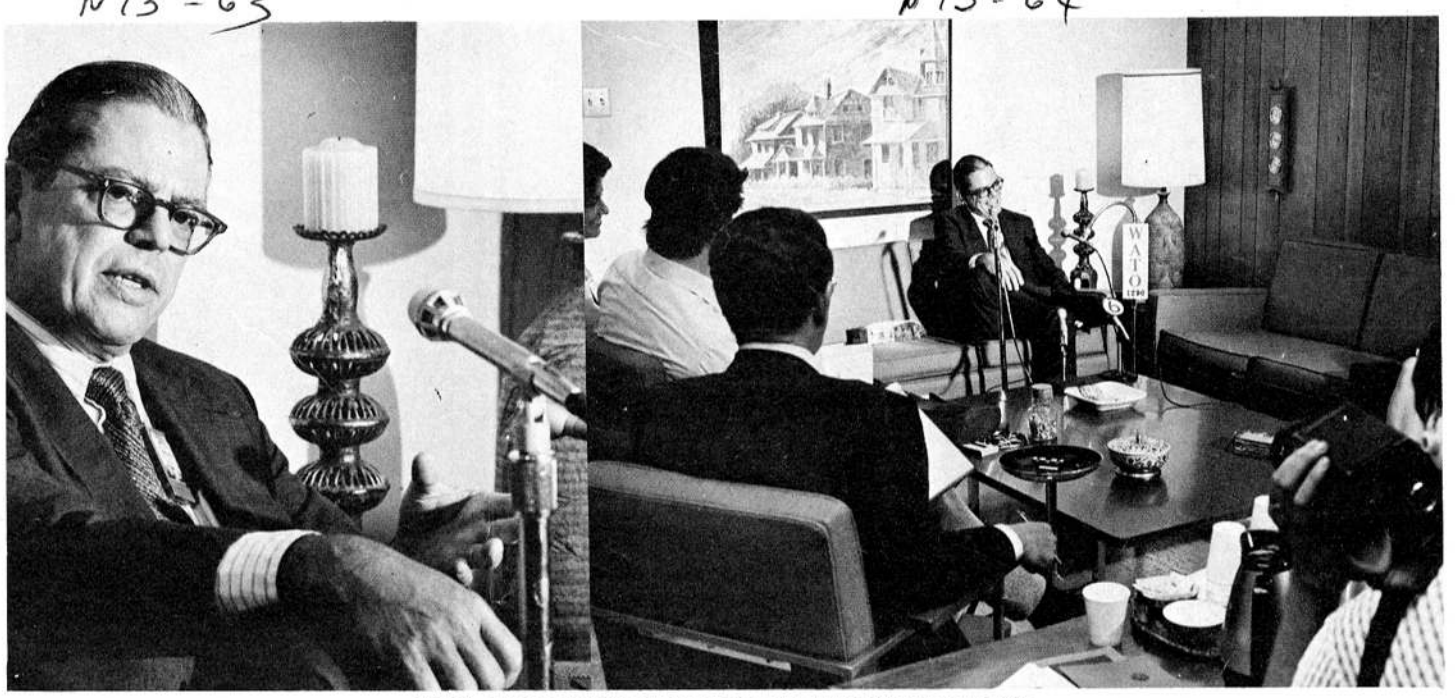


NUCLEAR DIVISION PRESIDENT MEETS THE PRESS

Katy's Kitchen was 'super secret' storage facility

by Ruby A. Miller

There have been many stories told about a facility which dwells in the woods of the area between ORNL and Y-12. This facility is best known as "Katy's Kitchen." Hopefully, this article will clear up some of the misconceptions, and disclose the true story of what Katy's Kitchen was and is.

In the fall of 1947, a young draftsman in the department of public works of the newly organized Atomic Energy Commission in Oak Ridge was asked to work on a special project. The draftsman, Luther Agee, who still works for AEC-ORO, was told that he was to design a "secret" facility according to specifications, but he was never told what the facility would be used for. He was instructed to discuss this project with no one.

Facility described

Agee's design included a concrete building which was partially underground, a barn-type structure and a farm silo. The idea was to camouflage the facility so that it could not be distinguished from the other old farms which dotted the area.

The outer walls of the building were of 12-inch-thick reinforced concrete. The building contained a long room which was designed so that a truck could be driven into it, a pump room, and a "room within a room." This innerroom was of standard bank vault construction, with 18-inch-thick walls, ceiling and floor. It was a vault in every sense of the word. It even had the heavy combination-lock door.

The barn was used to cover the outside entrance to the building, which was actually built into the side of a hill. The barn was a plain wooden structure with large swinging doors. It was designed to fit on the hill and down over the entrance to the building. From the ground it looked a little funny, if one bothered to look closely enough. But from the air it looked like an ordinary barn.

Silo adds authenticity

To add to the authenticity of the scene, the farm silo was built on the left side of the barn. The walls of the silo were of reinforced, 96-inch concrete pipes stacked one on the other, and surrounded by wooded staves. Rusted metal bands held the staves in place. The top of the silo was used as a watch tower for the guards. It was constructed of ¾ inch thick armor-plated metal and bullet-proof glass.

Construction of the facility was completed in the spring of 1948. William T. Sergeant, chief of AEC-ORO's Security Division, said the facility was known - but only by a few - as "Installation Dog." Sergeant headed the AEC's Security Patrol which was in charge of protecting the facility.

Alarm systems

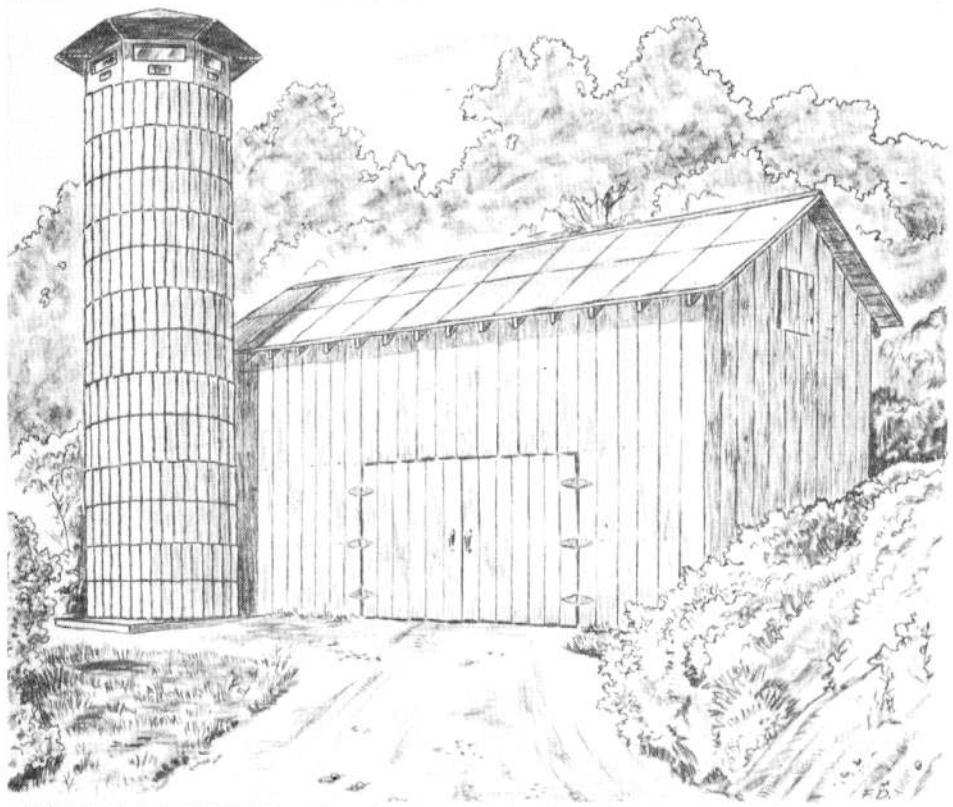
The entire area was surrounded by a GI combat-type barbed wire fence, and was rigged with a very elaborate alarm system. The alarm panels and controls were located in the Y-12 area, and responses were sent out from there. A series of codes had to be used in order to gain entrance to and exit from the area. Howard E. Rosser, who was a guard in the Security Patrol, recalls several occasions when the alarms were set off by foxes or other animals in the woods.

Sergeant explained that there were two main reasons why such elaborate security precautions were taken and why so few people knew the facility existed: ORGDP was the only facility engaged in the production of U-235, which made it very valuable, and the United States was the only country with a nuclear weapon at that time.

Original purpose

Installation Dog served as a temporary storage facility for enriched uranium after it was processed at Y-12, and before it was shipped to the weapons site. The uranium was taken to and from the facility by truck. No people actually worked in the building, except to unload and load the trucks. The only personnel present at the facility at all times were the two security guards.

Sergeant said that no one was allowed into the area unless authorized. Agee and the other personnel involved in the design, construction or maintenance of the facility had to undergo periodic polygraph tests to determine how much they knew and if they had discussed it with anyone else.



INSTALLATION DOG — The sketch represents how the original facility must have looked when it was used as a "top secret" storage bunker. (The sketch was prepared by ORNL Graphic Arts personnel consulting with Luther Agee, designer of the original facility.)

Installation Dog was only in use from May, 1948, to May, 1949, but was kept under guard for several years in case the need for it arose again.

How "Katy" got name

In 1957, the Analytical Chemistry Division at ORNL acquired the facility from AEC to be used as a low-level counting laboratory. The isolated location of the building and the shielded walls made it perfect for such use.

According to Larry T. Corbin, this is when the facility came to be known as Katy's Kitchen. Katherine Odom, who was secretary to Myron Kelley, the director of Analytical Chemistry, visited the facility several times after the low-level counting group moved in. She often had lunch there and it was decided by all concerned that "Katy's Kitchen," would be an appropriate name. Mrs. Odom's husband, Clyde, still works at ORNL.

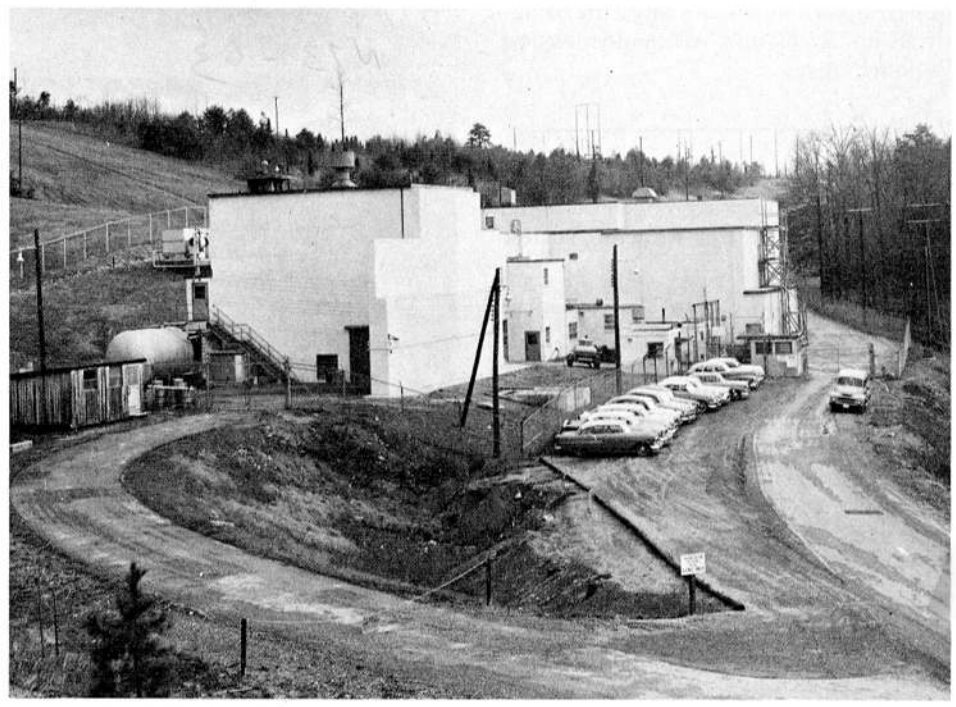
Walker Branch Watershed

Katy's Kitchen is now used as a laboratory for the Walker Branch Watershed studies by the Environmental Sciences Division at ORNL. Gray S. Henderson is director of the Walker Branch Watershed project, and Tom Grizzard is in charge of the facility. The objective of the study, as described by Henderson, is to investigate biogeochemical cycles of forested landscapes with emphasis on the interactions between terrestrial and aquatic ecosystems.

The present facility represents a big change from the original "Installation

(Continued on page 8)

BEFORE — Building 9213 was used to store enriched uranium before Katy's Kitchen was built in 1948. This building was heavily guarded, but was never camouflaged.



AFTER — Building 9213 is now the site of the Critical Experiments Facility. The present structure was built over the original facility. The vault and other rooms of the old building are used for storing materials.

Commitment, involvement key to affirmative action duties

Affirmative Action representatives were first appointed in December, 1971, to assist in carrying out the Nuclear Division's affirmative action program. Many of the original representatives have accepted the responsibilities for another year, and new faces have been added to the group.

The division heads have the responsibilities for conducting an effective affirmative action program within their divisions and affirmative action representatives are appointed by division heads to aid them in developing, implementing, monitoring and reporting the program that provides equal opportunity to all employees in the division in which that representative works. He, or she, also gets involved with representatives from other divisions, with the installation Equal Opportunity Coordinator, and with others of the installation staff, as well as employees in the division.

Meet regularly

The representatives meet on a regular basis with coordinators for each installation (Al G. Burris, Oak Ridge Gaseous Diffusion Plant; Herman G.P. Snyder, Y-12; Earl J. Nash, Oak Ridge National Laboratory; and H. Frank Shanklin, Paducah). The four installation coordinators meet regularly with the Nuclear Division's Equal Opportunity Coordinator, Charles A. Blake.

There are 76 people involved in the affirmative action program throughout the division. Of these 11 are blacks and 15 are women.

When the representative is a member of minority group, or a female, Blake stresses that the Nuclear Division looks especially to that representative for advice in planning and implementing affirmative action programs from the standpoint of minorities or women.

Commitment-involvement

One of the important functions of the Representative's job is to ensure that responses are made to employees who have questions, comments or complaints about the program or who feel they are being discriminated against on the basis of race, sex, religion, national origin or age.

Commitment and involvement are the keys to the success of the program, according to EO coordinator Blake. "Ideally, the affirmative action representative involves a significant part of the total division in making the program effective. The representative works to develop in the division the same strong commitment that the Nuclear Division and installation management have made to equal opportunity, and works to make sure each employee is aware of that sense of commitment. Our representatives have been vital to the success of the program in many areas. In some instances the organization has been less effective and we have fumbled the ball. Our goals for this year include making the role of the representatives better known and believable", Blake states and adds, "ask your representative how you can help."

The program involves all aspects of equal opportunity in hiring, promotion, termination and transfer, in training and education, in summer and youth programs, in communication of EO policy, and community participation.

At ORGDP, division representatives are: Al G. Burris, Industrial Relations; Jerry L. Hammontree, Barrier Manufacturing; B. Wayne McLaughlin, Fabrication and Maintenance; Leroy O'Hara, Operations; James G. Rogers, Shift Operations and Security; and Luther B. True, Finance and Materials.

Y-12's division representatives include: Leander E. Woods, Assembly; James M. Seivers and Billy T. Hicks, Industrial Relations; Levaughn Davis, Materials and Services; William G. Butturini, Product Engineering and Scheduling; Fran V. Tilson, Fabrication; David A. Jennings, Maintenance; W. Spence Wallace, Metal Preparation; and J. Robert DeMonbrun, Shift Superintendents.

Activities listed

Some of the representative's key activities include: Monitoring and reporting the progress toward meeting affirmative action goals; disseminating equal opportunity information to division employees; and knowing laws and regulations pertaining to equal opportunity.

ORNL representatives

Oak Ridge National Laboratory lists representatives: Wayne L. Maddox, Analytical Chemistry; David P. Allison and Marva F. Walton, Biology; W.R. Busing and Rosemary Lockyer, Chemistry; Jackie Sims, NSF Environmental Program; Nancy Ferguson, Environmental Sciences; Gloria M. Caton, Environmental Information Systems; Herbert G. Duggan, General Engineering; O. Charlene Reynolds, Health; A.D. Warden, Health Physics; Brena K. Stevens, Information; Jackson B. Davidson, Instrumentation and Controls; J.R. McGuffey, Inspection Engineering; Isotopes, Eugene Lamb; Larry P. Riordan, Laboratory Protection; Richard D. McCulloch, Mathematics; George M. Adamson, Metals and Ceramics; Neutron Physics, Temple A. Love; Robert E. Canning, Molecular Anatomy; E.J. Witkowski, Operations; Earl J. Nash, Personnel; Carl A. Ludemann, Physics; Charles R. Sherlin, Plant and Equipment; William B. Cottrell, Reactor; John W. Cleland, Solid State Physics; Al C. England, Thermonuclear; and Robert L. Smith, Budget and Program Planning.

At Paducah, representatives include: Paul A. Bielefeld, Cascade Operations; Hugh G. Coltharp, Industrial Relations; Jo A. Grisham, Finance and Materials; Wilma J. Payne, Planning and Technical Support; Bill D. Penry, Fabrication and Maintenance; Morris F. Shelton, Power, Utility and Chemical Operations; Alice L. Story, Laboratory; and William C. Taylor, Plant Engineering.

For the General Staff, the following are representatives: Harry J. Brown, General Accounting; Carl L. Butcher, Auditing; James A. Gillcrist, Computing Technology Center; Ed C. McFaddin, Law; Opal M. Waller, Purchasing; Charles A. Blake, General Industrial Relations; and Nelline Ross, Executive Offices.

Acting for Engineering in the production organization are: Warren D. Venable and D.S. Pesce at ORGDP; Dwayne Porter and J. Leo Waters, Y-12.

The production organization's Technical Divisions sent as representatives: Joyce B. Ferguson, Frank Gethers, R.L. Higgins, Andrea Zava, William E. Tewes, Clarence R. Teeter and Phyllis C. Johnson.

Oak Ridge Gaseous Diffusion Plant names four employees to new posts

Four promotions are announced at the Oak Ridge Gaseous Diffusion Plant. Three new assignments in Engineering include Wallace G. Billingsley, named an inspector; James H. Hannah, a mechanical engineer; and Mary E. Foust, an inspector. In Production, Bert M. Kelly has been promoted to a supervisory trainee.

Wallace G. Billingsley has been at ORGDP more than 20 years. A native of Claiborne County, he attended Lincoln Memorial University and the University of Kentucky. He played professional baseball, worked in the mines, and for the L&N Railroad, prior to his Carbide employment.

The Billingsleys live at 107 Pacific Road, Oak Ridge. Mrs. Billingsley is the former Edna L. Herd. They have two daughters, Dorris and Rebekah; and a son, David.

Billingsley enjoys football, basketball and baseball, coaching in several leagues. He also enjoys campaigning in local politics.

Billingsley

Miss Foust

Hannah

Kelly

James H. Hannah, Fabrication Development, was born in Maryville. He attended Tennessee Technological University and graduated from The University of Tennessee with a B.S. degree in mechanical engineering. He came to ORGDP two years ago.

Married to the former Pat Law, Hannah lives at 208 Harrell Street, Maryville. They have two sons, Jimmy and Charles.

For pasttime, Hannah enjoys hunting, camping and cycling.

Mary E. Foust, a native of Lake City, has been at ORGDP two years.

She worked at Magnet Mills, Apparel Corporation of American and Quality Clothing before joining Union Carbide.

Miss Foust lives at Route 1, Lake City, where she enjoys all sports, and reading.

Bert M. Kelly, a native of Wartburg, came to ORGDP in 1945. He served as a tank commander in World War II and worked in the Mobile Dry Dock prior to joining Union Carbide.

Mrs. Kelly is the former Velma Foust, and they live at 663 West Outer Drive, Oak Ridge.

Kelly enjoys fishing and hunting and various sports activities. He is on the board of directors of the K-25 Credit Union, and represents the Robertsville District on the Oak Ridge City Council.

CONGRESSMAN VISITS — Jack M. Case, Y-12 Plant Superintendent, welcomes Congressman Richard Fulton and his wife to the Training and Technology Project recently. At right, Teresa G. Bush, a TAT machinist trainee, demonstrates her skills to Richard Egli, AEC, from left, Richard E. Dew; Y-12 machining supervisor in the TAT Project and the visitors. Representative Fulton, who represents the Fifth Congressional District in Tennessee, is deputy Democratic whip in the U.S. House of Representatives.

COMPANY Service 20 25 30

ORGDP
30 YEARS

Mrs. Good Mrs. Sims

Two General Accounting Division employees mark their thirtieth anniversaries with Union Carbide this month - Faye Machir Good and Mary Palmer Sims.

Mrs. Good and her husband Joe live at Route 4, Clinton.

Mrs. Sims and Joseph W. Sims, her husband, live at 505-A Longview Road, Knoxville.

25 YEARS

Arthur G. Rea.

PADUCAH
30 YEARS

Miss Pate Smith

Two well-known Paducah employees observe their 30th anniversaries with Union Carbide this month -- Mary Lou Pate, Medical Division; and Robert F. Smith, analytical services laboratory.

Miss Pate, a native of Providence, Ky., graduated from the Bowling Green Business University and reported to the Milan Ordinance Works, Milan, Tenn. She moved to Oak Ridge shortly after that, and transferred to Paducah in 1951.

Miss Pate plans an early retirement next month.

Robert F. Smith, a native of Morgan County, Ky., came to work in Oak Ridge after receiving his B.S. degree from Morehead State University. He took special training at the SAM Laboratories at Columbia University, and transferred to Paducah in 1952.

Smith lives with his family at Route 6, Paducah.

20 YEARS

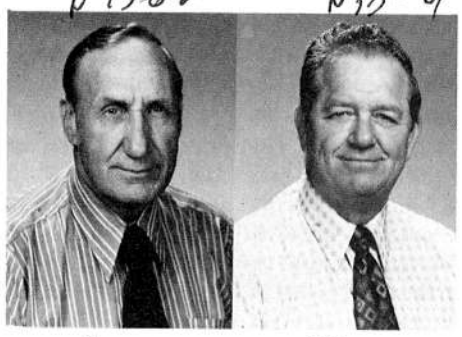
Leslie B. Batts, Edward A. Kohler Jr., James D. Garrison, Frank T. Wiggins and Prentis Moore.

Patents granted

To Kurt A. Kraus and Harvey A. Mahlman, ORNL, for "Cross-Flow Filtration Process for Removal of Total Organic Carbon and Phosphates from Aqueous Sewage Effluents."

To Jack P. Young, ORNL, for "Slotted Probe for Spectroscopic Measurements."

Y-12 PLANT
30 YEARS



Cavasos Fritts

Six Y-12ers cross 30 year landmarks with Union Carbide this month, adding more numbers to the long list of veterans in this area.

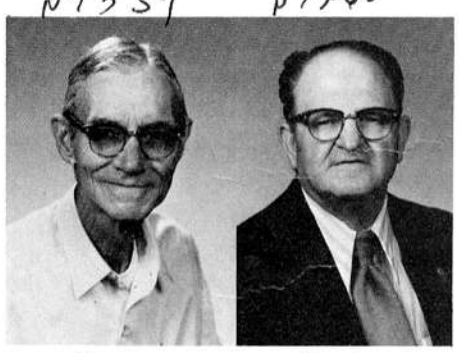
Elmer E. Cavasos, a native of Cleburne, Tex., is in Y-12's Engineering Division. A veteran of the U.S. Marine Corps, he lives at 1042 Artella Lane, Knoxville.

King C. Fritts, a native of Kingston, worked with the Meade Corporation before joining Y-12 in 1943. He also served in the U.S. Navy, and lives at Route 6, Harriman. He is in Y-12's Maintenance Division.

Mrs. Harris Miss Moody

Mrs. Elizabeth Y. Harris was born in Mantachie, Miss. She is in Special Services. Her husband, C.E. "Fuzz" Harris, also works in Y-12. They live on Sonja Drive in Concord.

Esther M. Moody, a native of Lenoir City, works in Product Engineering. She taught school before coming to Y-12, and lives at 194 North Purdue Avenue, Oak Ridge.



Norman Seagle

Arnold H. Norman, a native of Harriman, worked at the Meade Corporation there, before coming to Y-12. He lives at 611 Ozark Circle, Knoxville, and is in Utilities.

James P. Seagle, Materials Forming, is a native of Loudon. He worked with Holston Manufacturing, East Tennessee Packing and American National Company, before coming to Y-12. He lives at 114 Kingsley Road, Oak Ridge.

25 YEARS

William H. Rodgers, Fred M. Henry, Harold R. Bailey, James E. Minter and William P. Smith.

Y-12 produced film shows high-rack storage fire hazard

The documentary film record of a series of fire tests conducted by Union Carbide personnel at the Oak Ridge Y-12 Plant has been edited and compiled into a 23-minute motion picture that should be of value to firms, agencies or individuals concerned with the fire protection of materials stored in high racks.

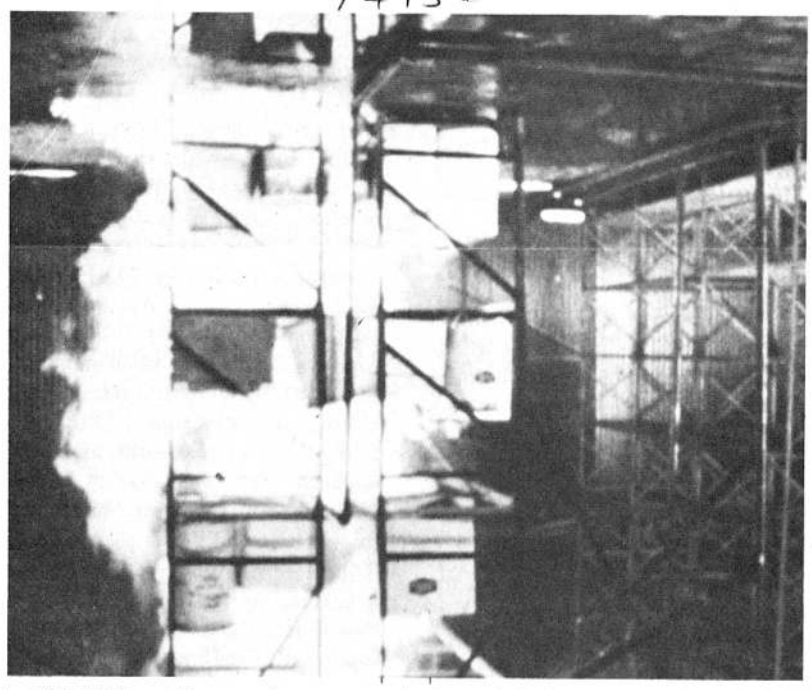
The motion picture, entitled "Fire Protection in High-Rack Storage," is in color and has sound narration. It depicts a number of tests conducted in the Y-12 fire training building with various types of Y-12 storage containers in combination with overhead and multilevel sprinklers.

The U.S. Atomic Energy Commission recently showed the film at a national meeting and has indicated an interest in making the film publicly available through its three film libraries located in Oak Ridge, Argonne and San Francisco.

The demonstrations were conducted under the direction of J. Robert Demonbrun, of the Plant Shift Superintendents Division. Other members of the test and evaluation committee were William G. Butturini, Product Engineering and Scheduling Division; John W. McCormick, PSS Division; Larry M. McLaughlin, Development Division; and William E. Weathersby, Engineering Division. Also assisting in the tests were members of the Y-12 Fire Department.

The movie cameramen were William N. Shipley and Ed R. Matney. The script and film were prepared by Robert L. Wesley, Classification and Information Division.

Applied to the particular storage situations in the Y-12 Plant, these tests revealed the following information: multilevel sprinklers are extremely effective in controlling fires in high-rack storage facilities; ceiling sprinklers above the racks are inadequate to control fire propagation; there was no apparent necessity for other controls such as gravity ventilation, bulkheads, draft curtains or smoke detectors; plastics; cardboard boxes and other flammable materials should not be used as outer containers; fire retardant coatings are effective in preventing damage to containers and their contents.



ALL AFLAME — Flames shoot upward through high-storage racks at Y-12's fire training building. A film documenting a series of tests made in Y-12 will soon be made available to the public.

FILM COMMITTEE — Members of the committee which conducted and evaluated the high-rank storage fire tests survey the test site. From left are John W. McCormick, William E. Weathersby, William G. Butturini, J. Robert Demonbrun and Larry M. McLaughlin.

MEETS CONGRESSMAN — Merle W. Fowler III, Paducah's Carbide Scholar, meets Congressman Frank A. Stubblefield during his recent stay in Washington. Fowler attended the Congressional seminar of the Washington Workshop Foundation. "Fabulous, beyond my wildest expectations," Fowler described his impressions of the summer seminar. Fowler is a senior at Paducah's Tilghman High School, and says he can't wait to report back to his classmates and teachers on his experiences with the nation's leaders.

ORGDP's Joe Hall named national SME secretary

Joseph C. Hall, superintendent of fabrication shops at the Oak Ridge Gaseous Diffusion Plant, has been elected 1973-74 secretary of the Society of Manufacturing Engineers.

An SME member and certified manufacturing engineer, Hall is past chairman of SME's Knoxville-Oak Ridge Chapter, of SME's Region Five, the national membership committee and the administrative council committee. He is a mechanical engineering graduate of Oklahoma State University.

Hall will help direct the worldwide activities of SME. Headquartered in Dearborn, Mich., the SME is an international organization with 40,000 members in 40 countries. A member of the World Federation of Engineering Organizations, the Society's purpose is to advance scientific knowledge in the field of manufacturing engineering and to apply its resources to research, writing, publishing and disseminating such information through various educational media including conferences and expositions.

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Joseph C. Hall

COMPANY Service

20 25 30

Y-12 PLANT
20 YEARS

Bobbie O. Watkins, William A. Kramer, Millard M. Maples, Jesse B. Brabson, David R. Masters, Gerald L. Carden Sr., Paul P. Beeler, Jesse M. Kesterson, Hayward G. Taylor, John P. Furlong, Lawrence M. McLaughlin Jr., Horace E. Hamilton Sr., Ersey O. Lamb, Willie H. Aiken, James A. Griffin Jr. and Carl B. Bridges Sr.

Calendar of EVENTS

TECHNICAL
July 25

ORAU-ORNL Summer Lecture Program: "Research on the Analysis of Cigarette Smoke," J.C. White. East Auditorium, Building 4500N, 4 p.m.

August 1

ORAU-ORNL Summer Lecture Program: "Research in Population Studies," Melvin M. Ketchel. East Auditorium, Building 4500N, 4 p.m.

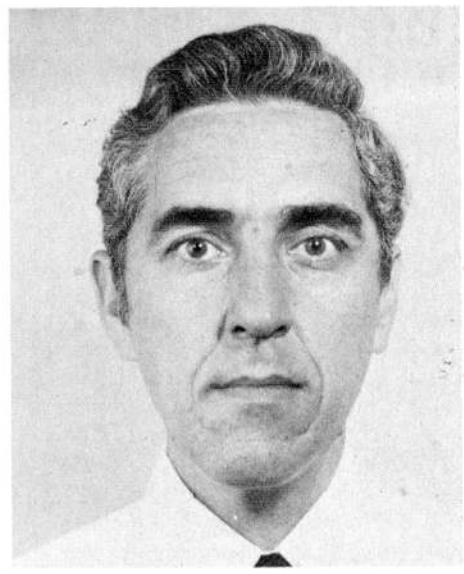
August 1-3

Neutron Physics Division Information Meeting: Oak Ridge National Laboratory.

Solid State's Ralph Moon Physical Society fellow

Ralph M. Moon Jr., of the Solid State Division at ORNL, was recently promoted to Fellowship in The American Physical Society by action of its Council. APS Fellowship is attained by those members who have made contributions to the advancement of physics by independent original research or who have rendered a special service to the field of physics which is considered equivalent to such investigations. The qualifications and publications of the candidates are reviewed by the Council to determine fulfillment of these requirements.

Moon joined the ORNL staff in 1963 shortly after he received the Ph.D. degree in physics from the Massachusetts Institute of Technology. He is a senior member of the neutron diffraction group, which utilizes the high intensity neutron beams from the ORR and HFIR to investigate the magnetic and dynamic properties of materials. His most recent research has involved the determination of magnetic structures and magnetic moment distributions in rare earth metals and compounds.



Ralph M. Moon Jr.

Moon has authored or co-authored about forty scientific publications and he has given numerous invited papers on his research at both national and international scientific conferences. He was recently elected by his scientific colleagues to membership on the Commission on Spin Density of the International Union of Crystallography.

Division Retirees

1563-73 ORNL 100746

Day

Rom

Several ORNL employees retired July 1.

Richard H. Busey was a research staff member in the Chemistry Division. He had worked at ORNL since September 1952. The Busey home is at 106 Tampa Lane, Oak Ridge.

Claude W. Day came to work for the Monsanto Company in the Y-12 area in 1946. He retired as a senior draftsman in the Thermonuclear Division. Day plans to spend his retirement working full-time as a real estate agent. He enjoys playing golf and bridge in his spare time. He and Margaret, his wife, live at 103 Dayton Road, Oak Ridge.

James I. Ezell reached the 30-year company service mark in May of this year. He was a fire and guard captain in the Laboratory Protection Division. Ezell lives at Route 26, Beaver Creek Drive, Knoxville.

John H. Frye was director of the Metals and Ceramics Division. The Frye home is at 69 High Forest, Tuscaloosa, Ala.

Thomas S. Mackey was a development specialist in the Isotopes Division. He joined the staff in 1943. Mackey resides at 1716 Tonalea Road, Knoxville.

Albert M. Rom will be working for the Tennessee Valley Authority in Knoxville. He was a design specialist in the Chemical Technology Division. He worked in both the Pilot Plant and Process Design sections, and worked for some time in Idaho during construction of ICPP. He and his family live at 111 Wendover Circle, Oak Ridge.

$22 million totals in toll enrichment

More than $22 million in toll enrichment sales were recorded at the Oak Ridge Gaseous Diffusion Plant during the second quarter of 1973, bringing sales for the year to date to approximately $45 million. This represents a significant increase over the first half of 1972, when toll enrichment sales totaled $30 million.

During the second quarter of 1973, more than 413,000 pounds of enriched uranium was shipped for use in nuclear reactors in Connecticut, Illinois, Minnesota, North Carolina, and Pennsylvania, as well as in Italy, Japan and Sweden.

Under the toll enrichment program, privately-licensed owners bring their uranium to a gaseous diffusion plant for enriching on a toll basis. Customers are charged for the services required to separate from natural uranium the desired percentage of the uranium-235 isotope, usually between 2 and 3 percent.

Next Issue

The next issue will be dated August 2. The deadline is July 25.

Levi L. Vineyard was an electrician in the Plant and Equipment Division. He has over 22 years of company service. The Vineyard home is at 1304 Irwin Road, Powell.

Fred Vaslow was a research staff member in the Chemistry Division. He had worked for Carbide since January 1957. Vaslow resides at 100 Orchard Lane, Oak Ridge.

RECREATIONOTES

ORGDP GOLF

Alvin Boatwright parred the Southwest Point course recently to take another ORGDP golf tournament. D.C. Lannom placed second with a 78. Bill Moon and Ed Powell took handicap lows, 77 and 79 each.

Cedric Patton netted 12 pars on the lakeside course.

In division two, it was D.F. Bennett, 83; and D.M. Papke, 84. In handicap count, there came Al Joiner, 84; and G.W. Bartlett, 85.

J.C. Cobb parred 10 holes.

Division three belonged to G.W. Lay and O.B. Young, 88 and 92. John Hamilton scored 89, and Henry McComb, 95, in handicap counting.

George Lockhart carded five pars.

ALL CARBIDE GOLF

The Patrick-Buffington team still leads the Southwest Point Golf League, three in front of the Lay-Creswell duo.

In the South Hills Shift League, the Rutherford-Watson pair won the first half by 10 points over Sise and Baxter. Earl Smith, turning the greens in pro-fashion, shot a low scratch of 36 recently, to tie Charlie Baxter for the day's honors. The second half started in league action last week.

The Sise-Boyd two lead the South Hills Golf League by a mere two points over Manley-Gipson. Their combined scratch score of 41 was also low for the day in recent action.

Y-12 GOLF

Charlie Baxter and Jim George tied with a one-under par 71 to take scratch honors in the Whittle Springs golf tournament in June. Harold Alvey scored a 74 in handicap firings in the first flight, and W.A. Rutherford tallied an 80.

Bill Sise counted 13 pars and Danny Rowan saw 12.

Ben Miller and T.E. Smith tied for the second division honors, with 79 each. John Sewell's 80 was handicap low, and Hugh Henderson followed with an 83.

Tom Wheeler parred 10 holes and Ray Riggs came through with nine.

A three-way tie rounded out the scoring in the third flight, as E.C. Smith, W.E. Smith and Mike Scarbrough all scored 84. J.D. Kirkpatrick scored 99 in handicap count; Bill Watkins 84.

Jess Johnson counted five pars.

ORNL GOLF

Bill Martin took honors at the Cedar Hills tournament, firing a 74, followed by J.D. Hudson, who tallied a 77. Handicap scores went to R.C. Bryant with a 75, and Charlie Coley with an 80.

Hershel Davis parred 11 holes, Henry Tuck nine.

Frank Hammerling scored an 81, to take flight two scratch honors, followed by Bob Stone, with 85.

Larry Gipson, firing an 86, took handicap lows; followed by Al Boch with 88.

Dewey Lee, Bob DeBakker and H.G. Bryson all scored six pars.

John Clinard took division three low with an 86 scratch, followed by Don Davis, with 90.

Guy Jones' 88 was low handicap score, and Wally McAfee followed with a 105.

Allen Petree counted five pars in the third flight.

Due to a conflict, ORNL's July 28 tournament at Wallace Hills has been postponed. It will be held Saturday, August 4. Please use the application blank that appeared in the last issue of Nuclear Division News.

Y-12 FISHING RODEO

A Shift in Y-12 staged a big fishing rodeo recently in the far reaches of Norris Lake, featuring prizes for walleyes and bass, both largemouth and smallmouth.

Chris Norman took the prize walleye, followed by Franklin Sweeten, Charlie Wilson and Emmett Moore. J.R. Robinette, Joe Tacket and Jesse Moles took the largest bass, in that order.

Don Stooksberry captured the dock prize.

CAMERA CLUB

June competition in the Camera Club saw Annette Powers, John Blankenship and David Haber take black and white honors, respectively. Bill Harper took first and third place in color portraiture, while Peggy Turner blocked the sweep, by taking second place.

July's competition is slides - nature and wildlife.

CARBIDE BOWLING

The Oops team stands atop the heap in the Family Mixed Bowling League, despite C.R. Lively's absence. They have lost only one game in four nights of action.

The Aristocrats take second place, five points behind.

PADUCAH EMPLOYEES ENJOY SUN — Employees at the Paducah Plant enjoy the Noble Park swimming pool during the summer months every Saturday morning. Complete services are available to Carbide employees and their families free.

CARBIDE SOFTBALL

"We're all in this together," carol the top four teams in the Carbide Softball League, as the Colts fell recently, taking their first loss of the year. The All Stars, Snakes and Tom's Gizzards are all still in there fighting for the lead.

League standings follow:

Team	W	L
Tom's Gizzards	9	1
All Stars	8	1
Snakes	7	1
Colts	6	1
Raiders II	7	2
Yellow Jackets	7	3
Red Barons	9	4
Supersonics	7	4
Gashouse Gang	6	4
Computes	6	5
Losers	4	5
Ecology	4	6
K-25 Mech's	4	7
Hornets	4	7
Buccaneers	4	9
Bio Rejects	3	6
Centaurs	3	7
Gene's Gang	2	7
Playmakers	2	7
Al's Pals	2	8
Bombers	1	10

CARBIDE SKEET LEAGUE

ORGDP's Bill Denton fired high in recent skeet firings, scoring 49.323. Charlie Asmanes, of Y-12, scored 49.065; while G.J. Kwiecien, K-25, took a 48.358.

PADUCAH SWIMMING PROGRAM

Paducah employees have until August 25 to swim every Saturday morning at the Noble Park Pool. It's all free for Carbiders and their families from 9 a.m. until noon.

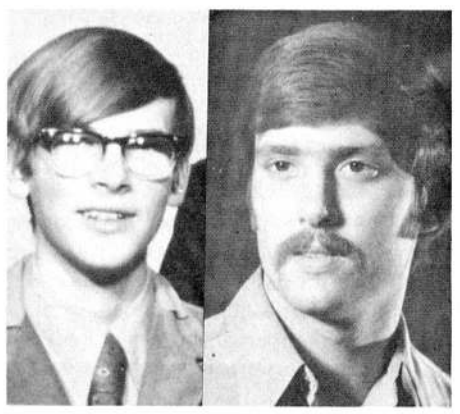
CARBIDE FISHING RODEO

Results have been posted in the semi-annual fishing rodeo sponsored for Carbide employees in the Oak Ridge area. Winners may be obtained by calling extension 3-5822. These names will be reported in the next issue of **Nuclear Division News.**

HIGH POWER RIFLE LEAGUE

Don Kiplinger of ORNL won the third match of the All Carbide High Power Rifle League with a 477 out of 500. Jack Huff, Y-12, scored second with a 469, and Jack Mrochek, ORNL, was third with 463.

Two ORNL sons earn merit scholarships



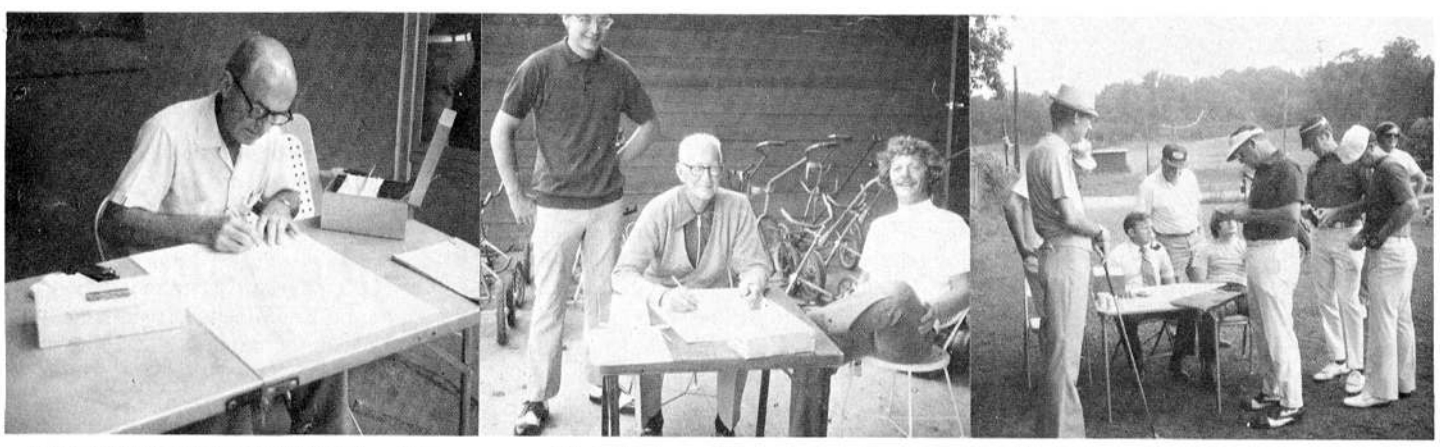
Ross Horton

Two Oak Ridge High School seniors have been awarded National Merit Scholarships. Both are sons of Oak Ridge Union Carbide employees.

Stephens Ross has been awarded a $1,000 scholarship from Radio Corporation of America. He plans to enter Georgia Tech to study electrical engineering. He is the son of William Ross, ORNL's Analytical Chemistry Division.

James W. Horton has received a scholarship to Transylvania University, Lexington, Ky. He is the son of John L. Horton, ORNL Instrumentation and Controls Division, and brother of Ann H. Tindell, ORNL's Mathematics Division.

Horton, who received a four-year science scholarship, recently attended Transylvania's Science Day program with his father, where he was officially presented the scholarship. He will study pre-denistry at Transylvania.



TOURNAMENT DIRECTORS — The success of Oak Ridge golf tournaments among Carbide dutters, depends to a large extent on the activities of three sportsmen, lending their talents to the coordination of tee-offs, cart assignments, etc. From left are Roy Clark, ORNL; Hardin Bryan, seated, retired ORGDP employee; and Joe Pryson, seated, from Y-12. Without them, Recreation Director E.W. Whitfield says, the tournaments would be pretty miserable things, indeed.

Psychotropic drug use

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)

By T. A. Lincoln, M.D.

Parents' misuse and abuse of alcohol and tranquilizers are often given as one reason why young people are vulnerable to drug abuse. According to this theory, parents are a model of behavior which their children follow when they encounter frustrations and adjustment problems.

If this is the case, the extent of present use and any trend toward increasing involvement with psychotropic drugs by adults is of concern.

For our purposes, psychotropic drugs may be divided into six groups based on their principal effect on mood and behavior. The major tranquilizers are used primarily in the treatment of the more severe psychiatric disorders and are sometimes called antipsychotic agents. The minor tranquilizers are often called anti-anxiety agents and became popular because they exerted their calming effect without producing severe drowsiness. The antidepressant drugs are used in treatment of depression and do not depend on generalized stimulation for their effect. The stimulants are amphetamine-type drugs which have been used to curb appetite, combat fatigue and create artificial alertness. The sedative drugs are primarily long- and intermediate-acting barbiturates but are taken in small enough doses to cause only mild drowsiness and a general calming. Hypnotic drugs include the barbiturates and several other compounds used as sleeping pills.

Many are refills

Psychotropic drugs reach users through several routes. In 1967, 178 million prescriptions for these drugs were filled in the United States at a retail cost of $692 million. There were 1.1 billion prescriptions filled for all kinds of drugs costing $3.9 billion. Thus about 17% of all prescriptions were for psychotropic drugs. If mixtures of these drugs with other drugs, for example, in preparations used in treating peptic ulcer or angina pectoris had been included, this percentage would have risen to almost 25 percent. Forty percent of psychotropic drug prescriptions were new prescriptions and 60 percent were refills.

Some of these drugs in small doses or in less potent related compounds can be obtained over the counter without prescriptions. Many people are given these drugs by their relatives or friends who had prescriptions filled and then not used. Especially amphetamines and barbiturates are obtainable in the illicit drug market.

Survey reports

In a national survey conducted by Drs. Mitchell Balter and Jerome Levine of the National Institute of Mental Health, one out of four adults had taken a psychotropic agent in the preceding 12 months and one out of two had taken one of these agents at least some time in their lives. In a California study, 21 percent reported that they had taken a prescription drug daily for five months or more.

Prescription drugs, especially minor tranquilizers and antidepressants, were used primarily by women (67 percent) in the 40-59 age group and they were much more likely to get a prescription from a physician while men more often resorted to over-the-counter or other nonmedical sources. Young people desired primarily stimulant drugs and infrequently went to a physician for a prescription.

Abuse not common

These investigators concluded that even though there was widespread use of psychotropic drugs, there was little evidence that large numbers of adults were becoming long-term users. These drugs were frequently prescribed as a part of the treatment of an organic illness and abuse was not common. Most people tended to be relatively conservative in their use. There was no evidence, at least as late as 1971, that there was a rapidly escalating use. As a matter of fact, their use was increasing at a slower rate than other drugs. Nevertheless, a small proportion of patients may account for a sizeable portion of the total used. In one study, 28 percent of the patients used 48 percent of the drugs acquired.

Even though psychotropic drugs may be a legitimate technological "fix" for various symptoms, one can be concerned about the individual who pops a pill to alter his mood or relieve distress rather than confronting his problem head on and attempting some change in life style. It is a sign of a widespread malaise in today's high-pressured society. Although most people are conservative in their use of drugs, a few apparently abuse them. We may have to wait 10 to 20 years to learn the full impact on the present population of young people. What will they be like when they reach 45?

ORNL credit union reaches 25 years

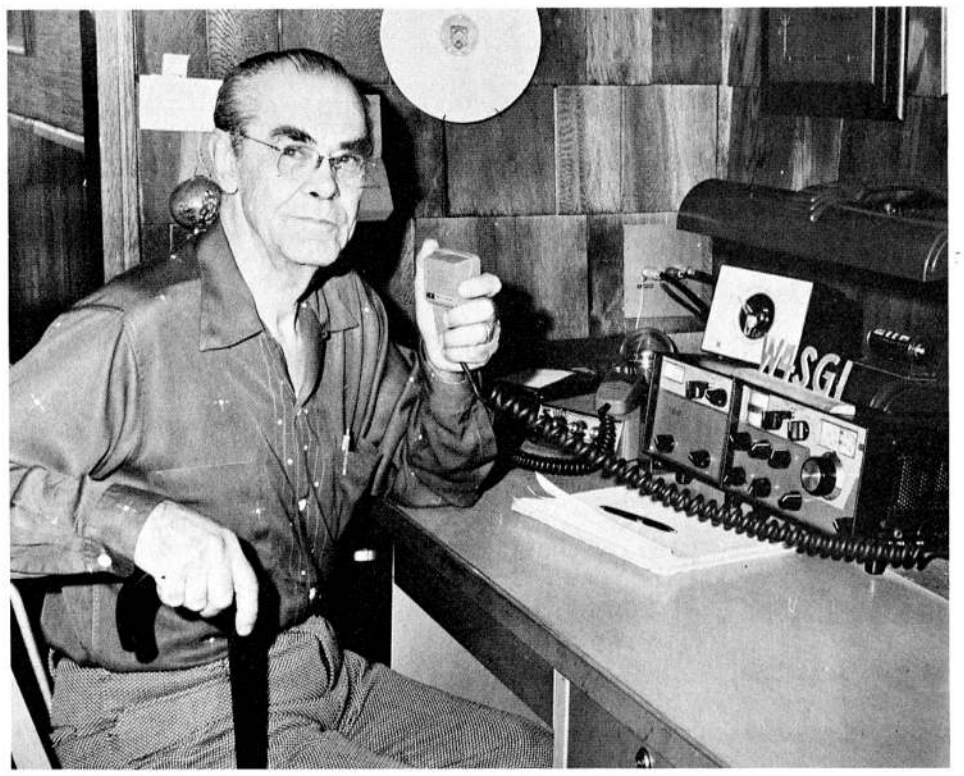
ORNL Employees' Federal Credit Union will celebrate its silver anniversary next month. The credit union was organized August 6, 1948.

Although the credit union's total assets were only three million dollars at the end of 15 years; it now has assets of over $15 million.

The board of directors has declared the entire month of August "Silver Anniversary Month." The celebration will include free refreshments and commemorative gifts to members visiting either office, and a drawing for a 1973 Nova on August 31.

A ticket for the drawing will be mailed to each member. Ask your Credit Union representative how you may obtain additional tickets.

Retirement marks beginning for ORNL's H. Eugene Banta



RADIO SYSTEM — H. Eugene Banta is shown with his low frequency Collins Station, which includes from 80 to 10 meter army-type equipment.

Retirement can be the beginning, at least it was for H. Eugene Banta. Thanks to his vast knowledge of electronics, especially radio communications, Banta is still in the mainstream of activity. He is Emergency Coordinator for Sevier County.

Banta worked as a physicist in ORNL's Instrumentation and Controls Division before taking early retirement in 1961. He worked for the Oak Ridge Associated Universities for another 10 years after leaving ORNL. Banta holds three degrees in physics from Rice University.

Banta and his wife live on the east end of Bluff Mountain, where they can see Sevierville, Pigeon Forge and Douglas Dam by just stepping onto the back patio. The main purpose for choosing this spot was that it is an ideal location for radio reception.

Two systems

There are two radio systems in the Banta home. A low-frequency Collins station located downstairs includes from 80 to 10 meter army-type equipment, which Banta repairs himself, because "there's no one else to fix it." The station upstairs, which Banta refers to as his "Japanese rig," is a six to two meter station with AM, FM and SSB capability. Banta has communicated with people in far away places as well as those closer to home. The fartherest point where he has made contact by radio is the South Pole.

Banta has received special recognition for participation in emergency services. Among his awards is a Public Service certificate from the Amateur Emergency Radio Service Journal. As an amateur radio operator, Banta is required to constantly be on standby for emergencies. He cannot receive monetary compensation for services, and must use his radio system for emergency communications only, not for public announcements.

Auxiliary power source

In the event of an electrical power failure, Banta has an independent gasoline powered generator which he can switch to and continue operation of his station until power is restored.

Being the wife of an amateur radio operator is not always an easy task. Besides leaving home (voluntarily) when the long-distant contact contests are held for local radio operators in the Banta home each year, Mrs. Banta has to tell time by a clock that registers 1300 hours instead of 1 p.m. Banta made the clock, which registers the time in green electric lights with the hour to the left, the minutes in the center and the seconds at the right.

Life after retirement means different things to different people, but to the H. Eugene Bantas, it is anything but dull.

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KATY'S KITCHEN TODAY — The barn-like structure has been removed and the entrance to the original building can be seen to the right. The farm silo remains intact, except for the wooden staves which have been removed. What was once the watch tower at the top of the silo is now a giant bee hive.

Katy's Kitchen facility

(Continued from page 2)

Dog." The barn structure has been removed; the long room into which trucks drove is an experimental laboratory, and the vault is used as an office. Even the building number has been changed. What used to be the "unknown" Building 9214, is now Building 0907.

Katy's older sister

While attempting to find out the facts about Katy's Kitchen, another facility which could be called Katy's older sister was discovered. This facility, Building 9213, was constructed in 1946 and was used for the storage of uranium until Katy's Kitchen was built. The two facilities are very much alike, in fact, Agee was taken to Building 9213, so that he could get ideas for designing Katy's Kitchen. This building was also built of reinforced concrete and had a "room within a room," of bank vault construction. Building 9213 was never camouflaged, but was heavily guarded. The Corps of Engineers was in charge of protecting the building, and its alarm system was tied into the Oak Ridge Police Department.

After Katy's Kitchen took over its function, Building 9213 became the site of what is now the Critical Experiments Facility. The original building is still intact and exists as part of the Critical Facility. The vault is used for storage. Dixon Callihan, director of the Critical Experiments Facility, supervised construction of the present facility in 1949. It is used to conduct critical experiments which entail accumulation of fissile and other materials of interest. Information gathered at the Facility is used in developing conceptual design for nuclear reactors, in determining safety standards for handling and processing fissile materials and for basic criticality research.

1604-73 1603-73

VAULT STILL USED — Johnnie J. Lynn, a 9213 building staff member from the Development Division at Y-12, is shown inside the vault with his hand on one of the original storage shelves. To the right, Lynn opens the heavy bank vault door.

Hibbs' press conference

(Continued from page 1)

Gaseous Diffusion Plant. He anticipates from 200 to 300 new jobs available at ORGDP in the immediate future. He cautioned, however, that some of these will be of a different "mix" from the terminating employees. "You can't take a chemist and use him as an electrical engineer," he explained.

Excellent contacts

Local industry can be expected to take some of the terminated employees, also, Hibbs pointed out. "Through our Training and Technology project we have excellent contacts for needs of industry throughout the entire Southeastern area, as well as the nation as a whole. This source has proved invaluable in placing personnel in the past."

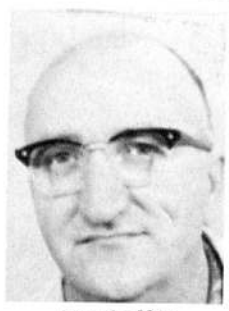
Fielding questions from the newsmen, Hibbs responded that it is difficult to forecast overall, long-range employment needs at Y-12. "We are dependent on the U.S. Congress, and the national defense needs of the nation."

In his opening statement, Hibbs said that the Nuclear Division personnel staff is confident that "they can find a job opportunity for every individual who will receive a layoff notice in the next year from the Y-12 Plant." He added, however, that in many cases personnel won't accept job offers if the jobs are not in the East Tennessee area.

Division Deaths

Russell L. Coffey, Y-12's Dimensional Inspection, died July 5, in a Knoxville hospital.

A native of Bluefield, W. Va., Mr. Coffey came to Y-12 in 1954, after working with the Pocahontas Fuel Company and the West Virginia Fuel Company.



Mr. Coffey

He is survived by his wife, Mrs. Nancy Phillips Coffey; daughters, Mrs. Ed LaRue and Miss Nancy Arwood; son, Gary S. Coffey; parents, Mr. and Mrs. Russell E. Coffey; two sisters; and six grandchildren.

Funeral services were held at Stevens Chapel, Knoxville, with the Rev. Harman Wells officiating. Masonic services were held at the graveside at Greenwood Cemetery.

WANTED

ORNL

CAR POOL MEMBER from West Knoxville (Suburban Shopping Center, Kingston Pike area) to South Portal, 8 a.m. shift. C.F. Holoway, plant phone 3-1426 or Knoxville 588-3028.

JOIN CAR POOL from Crestwood Forest area, Knoxville, to North or East Portal, either shift. W.E. Osterman, plant phone 3-6756.

Y-12 PLANT

RIDE from Oakwood, Harvey Street area, Knoxville, to Biology Division parking lot or North Portal at Y-12, 8 a.m. shift. Bonnie Straine, plant phone 3-7881; or Knoxville 522-4608.

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